



US006014847A

United States Patent [19]
Phillips

[11] **Patent Number:** 6,014,847
[45] **Date of Patent:** Jan. 18, 2000

- [54] **LAMINATED ROOFING SHINGLE HAVING STAGGERED SHADOW LINES AND METHOD OF MAKING THE SAME**
- [75] **Inventor:** John D. Phillips, Pataskala, Ohio
- [73] **Assignee:** Owens Corning Fiberglas Technology, Inc., Summit, Ill.

- [21] Appl. No.: 09/143,897
[22] Filed: Aug. 31, 1998
[51] Int. Cl.⁷ E04D 1/28
[52] U.S. Cl. 52/311.1; 52/314; 52/554;
52/555; 52/557; 52/745.19
[58] Field of Search 52/314, 554, 555,
52/557, 559, 745.19, 311.1; D25/139

[56] **References Cited**

U.S. PATENT DOCUMENTS

- D. 300,257 3/1989 Stahl .
D. 309,027 7/1990 Noone et al. .
D. 313,278 12/1990 Noone .
D. 336,347 6/1993 Hannah et al. .
D. 340,294 10/1993 Hannah et al. .
D. 343,911 2/1994 Hulett .
D. 369,421 4/1996 Kilk et al. .
D. 375,563 11/1996 Hannah et al. .
D. 376,660 12/1996 Hannah et al. .
D. 379,672 6/1997 Lamb et al. .
1,256,508 2/1918 Becker .
1,295,360 2/1919 Overbury .
1,345,627 7/1920 Overbury .
1,898,989 2/1933 Harshberger .
2,196,847 4/1940 Austin .
3,919,823 11/1975 Bradley .
4,274,243 6/1981 Corbin et al. .
5,195,290 3/1993 Hulett .
5,375,387 12/1994 Davenport .

- 5,405,647 4/1995 Grubka et al. .
5,426,902 6/1995 Stahl et al. .
5,488,807 2/1996 Terrenzio et al. .
5,611,185 3/1997 Weaver .
5,624,522 4/1997 Belt et al. .
5,660,014 8/1997 Stahl et al. .
5,664,585 9/1997 Koschitzky .
5,666,776 9/1997 Weaver et al. .

FOREIGN PATENT DOCUMENTS

- 66183 6/1990 Canada .
68259 3/1991 Canada .
68260 3/1991 Canada .

Primary Examiner—Christopher T. Kent
Attorney, Agent, or Firm—Inger H. Eckert; James J. Dottavio

[57] **ABSTRACT**

A laminated roofing shingle having staggered shadow lines comprises an underlay and an overlay attached to an underside of the overlay. The overlay has a plurality of spaced-apart tabs. An opening is defined between each one of the tabs. Portions of the underlay are exposed through the openings between the tabs. A layer of granules is disposed on the tabs and the underlay. The layer of granules on a lower portion of the overlay and on an upper portion of the overlay are substantially uniform in color and darker in color than the granules the remainder of the tabs and the underlay. The darker layers of granules produce staggered shadow lines which enhance the three-dimensional appearance of a roof surface upon which the shingles are applied. A method for making the laminated shingles comprises the steps of providing a base material, coating the base material, applying layers of granules to produce the shadow lines, cutting the fiberglass mat, and attaching the overlays and the underlays together to produce the staggered shadow lines.

20 Claims, 6 Drawing Sheets

